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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/786,361	07/26/2001	George M. Grass	109904-00015	6311
7590 01/06/2006			EXAMINER	
Arent Fox Kintner			BRUSCA, JOHN S	
Plotkin & Kahn Suite 600			ART UNIT	PAPER NUMBER
1050 Connecticut Avenue NW			1631	
Washington, DC 20036-5339			DATE MAILED: 01/06/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/786,361	GRASS ET AL.			
Office Action Summary	Examiner	Art Unit			
	John S. Brusca	1631			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONED	ely filed will be considered timely. the mailing date of this communication. 0 (35 U.S.C. § 133).			
Status					
<ul> <li>1)⊠ Responsive to communication(s) filed on 12 October 2005.</li> <li>2a)⊠ This action is FINAL.</li> <li>3)□ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.</li> </ul>					
Disposition of Claims					
4) ☐ Claim(s) 1-52,80-121 and 137-231 is/are pendid 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-52,80-121 and 137-231 is/are reject 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the original than the original	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior  application from the International Bureau  * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa				

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**DETAILED ACTION** 

**Priority** 

1. Applicant has not complied with one or more conditions for receiving the benefit of an

earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a

specific reference to the prior application(s) in the first sentence(s) of the specification or in an

application data sheet by identifying the prior application by application number (37 CFR

1.78(a)(2) and (a)(5)). If the prior application is a non-provisional application, the specific

reference must also include the relationship (i.e., continuation, divisional, or continuation-in-

part) between the applications except when the reference is to a prior application of a CPA

assigned the same application number.

No relationship to the non-provisional U.S. Applications are stated.

The amendment filed 12 October 2005 does not add a relationship to the claimed non-

provisional applications.

The amendment filed 12 October 2005 obviates a rejection for new matter by deletion of

incorporation by reference of the claimed applications.

Terminal Disclaimer

2. The terminal disclaimer filed on 12 October 2005 disclaiming the terminal portion of any

patent granted on this application which would extend beyond the expiration date of U.S. Patent

No. 6,542,858 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 112

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The rejection of claims 2-21, 106-114, 184-197, and 199-215 under 35 U.S.C. 112, first 3. paragraph, as failing to comply with the written description requirement in the Office action mailed 12 May 2005 is withdrawn in view of the arguments made by the applicants on page 4 of the response filed 12 October 2005.

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 1-53, 80-121, and 137-231 rejected under 35 U.S.C. 103(a) as being unpatentable over Grass (reference BW in the Information Disclosure Statement filed 17 July 2001) in view of Gex-Fabry et al. (reference BT in the Information Disclosure Statement filed 17 July 2001).

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The claims are drawn to a method of using a pharmacokinetic model to predict a

pharmacokinetic property of a compound in a second anatomical location by use of a

pharmacokinetic property of a test compound in a first anatomical location. In some

embodiments parameters such as a selected adjustment parameter or a regional correlation

parameter are refined by use of data from a plurality of compounds. In some embodiments the

claims are drawn to computers or programs that execute the method. In some embodiments the

model uses in vitro data, log functions, programs and computers using if. then statements,

models comprising absorption models in the gastrointestinal tract, differential equations, and

models that comprise properties of two different species of animal or tissues or cells.

Grass et al. shows in the abstract and throughout pharmacokinetic models that predict

behavior of compounds in animals. Grass shows use of in vivo, in situ, and in vitro

pharmacokinetic data of compounds on pages 202-205, models with log functions on page 205,

computers and programs that execute the method on page 207, programs with if..then statements

on page 207. models of absorption in multiple segments of the gastrointestinal tract on page 207

and throughout, models using differential equations on page 208, models that compare behavior

of different species of animals on pages 209-211, and models that use behavior of tissue and in

vitro cells on page 209-211. Grass shows in figures 19 and 20 that the models provide accurate

predictions of absorption of two different compounds in the gastrointestinal tract. Grass et al.

does not explicitly show fitting of pharmacokinetic data of multiple compounds to derive

parameters for use in the model.

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Gex-Fabry et al. reviews computer models of pharmacokinetic behavior of compounds in anatomical sites. Gex-Fabry et al. shows on page 513 and beyond the use of data to refine parameter values that are used in computer pharmacokinetic models.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method and computer models of Grass et al. by refining the parameters used in the model by use of data from a plurality of compounds because Gex-Fabry et al. shows such refinement is useful to obtain more accurate parameters.

### **Double Patenting**

The rejection of claims 1-53, 80-86, 88-101, 104-121, 137-147, 149-163, and 165-231 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-82 of U.S. Patent No. 6,542,858 in the Office action mailed 12 May 2005 is withdrawn in view of the terminal disclaimer filed 12 October 2005.

The rejection of claims 1-53, 80-114, and 137-231 under 35 U.S.C. 102(f) because the 7. applicant did not invent the claimed subject matter in the Office action mailed 12 May 2005 is withdrawn because the inventive entity of the instant application and U.S. Patent Nos. 6,542,858 and 6,647,358 are identical.

## Response to Arguments

8. Applicant's arguments filed 12 October 2005 have been fully considered but they are not persuasive. The applicants state that the method of Grass works effectively without the correction methods of Gax-Febry et al. However that does not preclude further improvement by use of the correction method of Gax-Febry et al., and Grass does not explicitly teach away from

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using the correction method of Gax-Febry et al. Because Gax-Febry et al. shows method of refining models of pharmaceutical action that is of general applicability, the combination of references is obvious and the rejection is maintained.

#### Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of

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the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center at (800) 786-9199. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Brusca whose telephone number is 571 272-0714. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, PhD. can be reached on 571 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John S. Brusca 4 January 200 b

**Primary Examiner** 

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jsb